

Amendments to the Specification:

Please replace paragraph [0038] with the following rewritten paragraph:

The X-ray tube 56 described herein may be used in fast CT scanning, such as with a gantry rotation speed of three rotations per second or better. Indeed, in one implementation five rotations per second (i.e., a rotation every 0.2 seconds) may be achieved. In addition, the X-ray tube 56 described herein may provide high-voltage stability of up to 200 kV in operation and axial coverage of up to 80 mm from the focal spot. Axial coverage is defined as the extent of the possible x-ray beam from the x-ray tube 56 along an axis of a patient. In addition, these benefits may be obtained with a compact configuration of the X-ray tube 56 having reduced size and weight relative to other configurations. Furthermore, the compact design and the use of dual duplex bearing assemblies 82, 84 which straddle the target allow to the X-ray tube 56 to withstand the high structural stresses of up to 65g which may be associated with faster gantry rotational speeds. The X-ray tubes 56, therefore, may be used to enable faster gantry rotations of the CT imaging system 10, thereby increasing temporal resolution and improving diagnostic capability.